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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,809	01/26/2004	Susan M. Coatney	112056-0131	9764

			EXAMINER
24267	7590	09/19/2006	WILSON, YOLANDA L

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ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/764,809	COATNEY ET AL.
	Examiner	Art Unit	
	Yolanda L. Wilson	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 January 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>11/04;07/05;02/05</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by

Fujimoto (US Publication Number 20060150035A1). As per claim 1, Fujimoto discloses

a method for taking over a failed filer owning disks that store file service data and

owning at least one disk that is free of file service data by a clustered partner filer, the

failed filer being adapted to perform a coredump in which, in the event of failure,

memory contents of the failed filer are transferred to a disk, the method comprising the

steps of: changing, by the failed filer, a coredump attribute on the disk that is free of file

service data (the "coredump disk") from a non-coredump state to a coredump state and

maintaining the coredump attribute on other disks owned by the failed filer in a non-

coredump state; writing the memory contents to the coredump disk; identifying, by the

clustered partner filer, the coredump attribute of the other disks and taking ownership of

the other disks while allowing the failed filer to maintain ownership of the coredump

disk; upon completion of the writing of the memory contents, changing the coredump

attribute to a non-coredump state; and upon identification of the non-coredump state in

the coredump attribute of the coredump disk, taking ownership, by the clustered partner

filer, of the coredump disk on pages 8 and 9, paragraphs 0110-0112. The non-

coredump state is when the coredump disk is not in use.

3.   As per claim 2, Fujimoto discloses where the coredump disk is a spare disk

owned by the failed filer on page 9, paragraph 0111.

4.   As per claim 3, Fujimoto discloses where the coredump disk is a disk dedicated

to a coredump on page 9, paragraph 0111.

5.   As per claim 4, Fujimoto discloses further comprising the step of creating, from

the memory contents written on the coredump disk, a coredump data set for diagnosis

of the failing filer and writing the coredump file to the file system root of the failing filer

on pages 8 and 9, paragraph 0110.

6.   As per claim 5, Fujimoto discloses where the step of writing the memory contents

includes limiting writing to the coredump disk to a predetermined time limit following a

failure event of the failed filer on page 9, paragraph 0114.

7.   As per claim 6, Fujimoto discloses wherein the predetermined time limit is less

than a maximum time a panic of a network communicating with each of the failed filer

and the clustered partner filer occurs on pages 8 and 9, paragraphs 0110-0112. It is

inherent that processes have a time limit over a network.

8.   As per claim 7, Fujimoto discloses wherein the step of limiting includes, upon

elapsing of the predetermined time limit, changing the coredump attribute of the

coredump disk to a non-coredump state on pages 8 and 9, paragraphs 0110-0112.

9.   As per claim 8, Fujimoto discloses wherein the coredump disk and each of the

other disks owned by the failed filer include a plurality of predetermined regions

including a coredump region and a file system data storage region and wherein the step

of writing of the memory contents includes writing the memory contents into the file

system data storage region of the coredump disk on page 9, paragraph 0111.

10.   As per claim 9, Fujimoto discloses wherein the coredump region includes a

coredump header adapted to store the coredump attribute on pages 8 and 9, paragraph

0110.

11.   As per claim 10, Fujimoto discloses a first server owning interconnected first

storage devices and a second server owning interconnected second storage devices,

the first server and the second server being connected together by a cluster

interconnect so that the second server can take over ownership of the first storage

devices upon failure of the first server; the storage system comprising: a coredump

function that (a) causes the first server to write its memory to a coredump storage

device chosen from one of the first storage devices in response to a sensed failure of

the first server, each of the first storage devices including a coredump attribute (b)

causes the attribute of the coredump storage device to be set to a coredump state and

the coredump attribute of other of the first storage devices to be set to a non-coredump

state; and a takeover function that (a) identifies each of the first storage devices with the

coredump attribute set to the non-coredump state, (b) changes of each of the second

devices having the coredump attribute set to the non-coredump state from ownership by

the first server to ownership by the second server so that takeover of the ownership can

proceed in parallel with the writing of the memory to the coredump storage device on pages 8 and 9, paragraphs 0108,0110-0112 and page 2, paragraph 0039. The non-coredump state is when the coredump disk is not in use.

12.   As per claim 11, Fujimoto discloses wherein the takeover function is adapted to cause the second server to logically assume ownership of the coredump storage device after the earlier of either an elapsing of a predetermined time limit or a completion of the writing of the memory to the coredump storage device on page 8 and 9, paragraphs 0108,0110-0112.

13.   As per claim 12, Fujimoto discloses wherein the coredump function is adapted to cause the coredump attribute of the coredump storage device to be changed to a non-coredump state after either the elapsing of the predetermined time limit or the completion of the writing of the memory to the coredump storage device on pages 8 and 9, paragraphs 0108,0110-0112.

14.   As per claim 13, Fujimoto discloses wherein the non-coredump state comprises each of an aborted state, a completed state and a non-active state on pages 8 and 9, paragraph 0110-0112. The non-coredump state is when the coredump disk is not in use.

15.   As per claim 14, Fujimoto discloses wherein the first storage devices each comprise a disk drive engaged in file service activity and the coredump storage device comprises a spare disk that is free of file service activity on page 9, paragraph 0111.

16.   As per claims 15,23, Fujimoto discloses a first server owning interconnected first storage devices and a second server owning interconnected second storage devices,

the first server and the second server being connected together by a cluster

interconnect so that the second server can take over ownership of the first storage

devices upon failure of the first server; the computer-readable medium including

program instructions for performing the steps of: writing, by the first server, its memory

to a coredump storage device chosen from one of the first storage devices in response

to a sensed failure of the first server, each of the first storage devices including a

coredump attribute; setting the attribute of the coredump storage device to be set to a

coredump state and the coredump attribute of other of the first storage devices to be set

to set to a non-coredump state; identifying each of the first storage devices with the

coredump attribute set to the non-coredump state; changing of each of the second

devices having the coredump attribute set to the non-coredump state from ownership by

the first server to ownership by the second server so that takeover of the ownership can

proceed in parallel with the writing of the memory to the coredump storage device on

pages 8 and 9, paragraphs 0108,0110-0112 and page 2, paragraph 0039. The non-

coredump state is when the coredump disk is not in use.

17.   As per claims 16,24, Fujimoto discloses causing the second server to logically

assume ownership of the coredump storage device after the earlier of either an elapsing

of a predetermined time limit or a completion of the writing of the memory to the

coredump storage device on page 8 and 9, paragraphs 0108,0110-0112.

18.   As per claim 17, Fujimoto discloses causing the coredump attribute of the

coredump storage device to be changed to a non-coredump state after either the

elapsing of the predetermined time limit or the completion of the writing of the memory

to the coredump storage device on page 8 and 9, paragraphs 0108,0110-0112.

19.   As per claim 18, Fujimoto discloses wherein the non-coredump state comprises

each of an aborted state, a completed state and a non-active state on page 9,

paragraph 0111. The non-coredump state is when the coredump disk is not in use.

20.   As per claim 19, Fujimoto discloses wherein the first storage devices each

comprise a disk drive engaged in file service activity and the coredump storage device

comprises a spare disk that is free of file service activity on page 9, paragraph 0111.

21.   As per claim 20, Fujimoto discloses wherein each of the first storage devices

includes a coredump information region and a file system region and wherein the

memory is written into the file system region of the coredump storage device on page 9,

paragraph 0112.

22.   As per claim 21, Fujimoto discloses the step of creating, with the second server,

a coredump data set from the memory written to the coredump storage device, the data

set being adapted to enable diagnosis of a fault relative to the first server on page 9,

paragraphs 0111,0112.

23.   As per claim 22, Fujimoto discloses the step of writing the coredump data set by

the second server to a file system root of the first server stored on the first storage

devices on page 9, paragraph 0112.

24.   As per claim 25, Fujimoto discloses wherein the step of changing includes setting

a reservation on each of second storage devices so as to establish ownership by the

second server on page 8, paragraph 0108.

25.   As per claim 26, Fujimoto discloses wherein the reservation comprises a SCSI-3

reservation on page 2, paragraph 0040.

Claim Rejections - 35 USC § 101

26.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
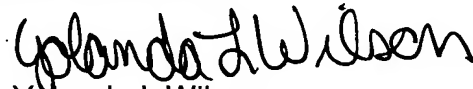> conditions and requirements of this title.

Claims 10-14 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. These claims recite 'a coredump

function... takeover function...' which merely recite software per se.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Yolanda L. Wilson whose telephone number is (571)

272-3653. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yolanda L Wilson
Examiner
Art Unit 2113